



## Clinical trial results:

**A multicenter, prospective, open-label, clinical study to assess the effect of using a new risk score approach to select the most appropriate prophylaxis regimen for reaching a favorable outcome, when hemophilia A patients switch from standard half-life (SHL) products to damoctocog alfa pegol (Jivi)**

### Summary

EudraCT number	2021-006191-16
Trial protocol	Outside EU/EEA
Global end of trial date	17 October 2024

### Results information

Result version number	v1 (current)
This version publication date	09 April 2025
First version publication date	09 April 2025

### Trial information

#### Trial identification

Sponsor protocol code	BAY94-9027/21924
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#### Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT05036278
WHO universal trial number (UTN)	-

Notes:

### Sponsors

Sponsor organisation name	Bayer HealthCare Pharmaceuticals Inc.
Sponsor organisation address	100 Bayer Boulevard, P.O. Box 915, Whippany, United States,
Public contact	Bayer Clinical Trials Contact, Bayer AG, clinical-trials-contact@bayer.com
Scientific contact	Bayer Clinical Trials Contact, Bayer AG, clinical-trials-contact@bayer.com

Notes:

### Paediatric regulatory details

Is trial part of an agreed paediatric investigation plan (PIP)	No
Does article 45 of REGULATION (EC) No 1901/2006 apply to this trial?	No
Does article 46 of REGULATION (EC) No 1901/2006 apply to this trial?	No

Notes:

## Results analysis stage

Analysis stage	Final
Date of interim/final analysis	17 January 2025
Is this the analysis of the primary completion data?	No

Global end of trial reached?	Yes
Global end of trial date	17 October 2024
Was the trial ended prematurely?	No

Notes:

## General information about the trial

Main objective of the trial:

To assess the effect of using a baseline risk score, based on a participant's phenotypic and biologic variables, to select the most appropriate prophylaxis regimen for reaching a favorable outcome, when switching from a SHL product to Jivi

Protection of trial subjects:

The conduct of this clinical study met all local legal and regulatory requirements. The study was conducted in accordance with ethical principles that have their origin in the Declaration of Helsinki and the International Council for Harmonization guideline E6: Good Clinical Practice. Before entering the study, the informed consent was read by and explained to all the subjects. Participating subjects signed informed consent form and could withdraw from the study at any time without any disadvantage and without having to provide a reason for this decision. Only investigators qualified by training and experience were selected as appropriate experts to investigate the study drug.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	28 July 2022
Long term follow-up planned	No
Independent data monitoring committee (IDMC) involvement?	No

Notes:

## Population of trial subjects

### Subjects enrolled per country

Country: Number of subjects enrolled	United States: 21
Worldwide total number of subjects	21
EEA total number of subjects	0

Notes:

### Subjects enrolled per age group

In utero	0
Preterm newborn - gestational age < 37 wk	0
Newborns (0-27 days)	0
Infants and toddlers (28 days-23 months)	0
Children (2-11 years)	0
Adolescents (12-17 years)	3
Adults (18-64 years)	17

From 65 to 84 years	1
85 years and over	0

## Subject disposition

### Recruitment

Recruitment details:

The study was conducted at 14 study centers in the US between 28 July 2022 (first participant first visit) and 03 September 2024 (last participant last visit).

### Pre-assignment

Screening details:

A total of 21 participants were enrolled. 21 participants were assigned to treatment.

### Period 1

Period 1 title	overall (overall period)
Is this the baseline period?	Yes
Allocation method	Not applicable
Blinding used	Not blinded

### Arms

Arm title	overall
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Arm description:

all participants enrolled

Arm type	Experimental
Investigational medicinal product name	Jivi
Investigational medicinal product code	
Other name	BAY94-9027, Damoctocog alfa pegol, recombinant coagulation FVIII
Pharmaceutical forms	Powder for solution for infusion
Routes of administration	Intravenous use

Dosage and administration details:

vial sizes of 500 and 2000 IU international unit(s)

All eligible participants will start treatment 2x/week (40 IU/kg/dose) with Jivi for 4 weeks. Treatment will then continue according to their assignment to 1 of the 3 following prophylaxis regimens:

- Participants with a high risk score (> 4) continue on prophylaxis 2x/week (40 IU/kg/dose)
- Participants with a medium risk score (2 to 4) will switch after 4 weeks to prophylaxis Q5D (50 IU/kg/dose)
- Participants with a low risk score (< 2) will switch after 4 weeks to prophylaxis Q5D (50 IU/kg/dose) and then after 4 weeks to a less frequent (e.g. Q7D) regimen (60 IU/kg/dose)

Number of subjects in period 1	overall
Started	21
Completed	19
Not completed	2
Consent withdrawn by subject	1
Adverse event, non-fatal	1

## Baseline characteristics

### Reporting groups

Reporting group title	overall
Reporting group description: -	

Reporting group values	overall	Total	
Number of subjects	21	21	
Age categorical			
Units: Subjects			
Adolescents (12-17 years)	3	3	
Adults (18-64 years)	17	17	
From 65-84 years	1	1	
Gender categorical			
Units: Subjects			
Female	2	2	
Male	19	19	

### Subject analysis sets

Subject analysis set title	Modified intent to treat set
Subject analysis set type	Modified intention-to-treat
Subject analysis set description:	
All participants enrolled and followed for at least 4 months	
Subject analysis set title	Safety analysis set
Subject analysis set type	Safety analysis
Subject analysis set description:	
all participants enrolled, who received at least one dose of Jivi	
Subject analysis set title	Censored modified intent to treat set
Subject analysis set type	Modified intention-to-treat
Subject analysis set description:	
all patients enrolled, followed for at least 4 months and not having switched from the score assigned regimen	

Reporting group values	Modified intent to treat set	Safety analysis set	Censored modified intent to treat set
Number of subjects	19	21	17
Age categorical			
Units: Subjects			
Adolescents (12-17 years)	3	3	3
Adults (18-64 years)	15	17	13
From 65-84 years	1	1	1
Gender categorical			
Units: Subjects			
Female	2	2	2
Male	17	19	15

## End points

### End points reporting groups

Reporting group title	overall
Reporting group description: all participants enrolled	
Subject analysis set title	Modified intent to treat set
Subject analysis set type	Modified intention-to-treat
Subject analysis set description: All participants enrolled and followed for at least 4 months	
Subject analysis set title	Safety analysis set
Subject analysis set type	Safety analysis
Subject analysis set description: all participants enrolled, who received at least one dose of Jivi	
Subject analysis set title	Censored modified intent to treat set
Subject analysis set type	Modified intention-to-treat
Subject analysis set description: all patients enrolled, followed for at least 4 months and not having switched from the score assigned regimen	

### Primary: Occurrence of favorable outcome on the score selected dosing regimen

End point title	Occurrence of favorable outcome on the score selected dosing regimen <sup>[1]</sup>
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End point description:

To assess the effect of using a baseline risk score, based on a participant's phenotypic and biologic variables, to select the most appropriate prophylaxis regimen for reaching a favorable outcome, when switching from a standard half-life (SHL) product to Jivi.

t\_140201

Table 14.2/3 (censored modified intention to treat set)

End point type	Primary
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End point timeframe:

up to 6 months

Notes:

[1] - No statistical analyses have been specified for this primary end point. It is expected there is at least one statistical analysis for each primary end point.

Justification: Only descriptive statistics were applied in this study due to low number of participants. As this is a single arm study, no comparative statistics were applied.

End point values	Censored modified intent to treat set			
Subject group type	Subject analysis set			
Number of subjects analysed	17			
Units: participants with favorable outcome	12			

### Statistical analyses

No statistical analyses for this end point

**Secondary: Annualized bleeding rate (ABR) (total, joint, spontaneous)**

End point title	Annualized bleeding rate (ABR) (total, joint, spontaneous)
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End point description:

To assess the efficacy of Jivi compared to a previous SHL treatment.

t\_140207

End point type	Secondary
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End point timeframe:

up to 6 months

End point values	Censored modified intent to treat set			
Subject group type	Subject analysis set			
Number of subjects analysed	17			
Units: bleeds per year				
arithmetic mean (standard deviation)				
total bleeds	4.172 ( $\pm$ 5.516)			
joint bleeds	2.800 ( $\pm$ 4.160)			
spontaneous bleeds	1.788 ( $\pm$ 3.968)			

**Statistical analyses**

No statistical analyses for this end point

**Secondary: Change in total ABR from pre-study**

End point title	Change in total ABR from pre-study
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End point description:

To assess the efficacy of Jivi compared to a previous SHL treatment.

Table 14.2/6.1

End point type	Secondary
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End point timeframe:

up to 6 months

End point values	Censored modified intent to treat set			
Subject group type	Subject analysis set			
Number of subjects analysed	17			
Units: annual bleeding rate				
arithmetic mean (standard deviation)	-8.005 ( $\pm$ 15.242)			

## Statistical analyses

No statistical analyses for this end point

### Secondary: Change in the frequency of pre-study SHL treatment to the frequency of Jivi administration (infusions/month)

End point title	Change in the frequency of pre-study SHL treatment to the frequency of Jivi administration (infusions/month)
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End point description:

To assess the frequency of Jivi administration.  
t\_140116

Table 14.1/16

End point type	Secondary
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End point timeframe:

up to 6 months

<b>End point values</b>	Censored modified intent to treat set			
Subject group type	Subject analysis set			
Number of subjects analysed	17			
Units: infusions per month				
arithmetic mean (standard deviation)	-6.876 ( $\pm$ 4.7557)			

## Statistical analyses

No statistical analyses for this end point

### Secondary: Occurrence of participants with 0 and $\leq 1$ spontaneous bleeds

End point title	Occurrence of participants with 0 and $\leq 1$ spontaneous bleeds
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End point description:

To assess the proportion of participants with 0 and  $\leq 1$  spontaneous bleeds.  
Table 14.2/9

End point type	Secondary
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End point timeframe:

up to 6 months



End point values	Modified intent to treat set			
Subject group type	Subject analysis set			
Number of subjects analysed	19			
Units: participants				
0 spontaneous bleed	13			
<=1 spontaneous bleed	13			

### Statistical analyses

No statistical analyses for this end point

### Secondary: Change in Haemophilia Quality of Life Questionnaire (Haem-A-QoL or Haemo-QoL)

End point title	Change in Haemophilia Quality of Life Questionnaire (Haem-A-QoL or Haemo-QoL)
End point description: To assess participant quality of life (QoL) and physical activity, as measured by Patient Reported Outcomes (PROs).	
Table 14.2/13	
End point type	Secondary
End point timeframe: up to 6 months	

End point values	Modified intent to treat set			
Subject group type	Subject analysis set			
Number of subjects analysed	10 <sup>[2]</sup>			
Units: Score				
arithmetic mean (standard deviation)				
Visit 2 (Baseline)	31.5 (± 16.38)			
Visit 6 (Change from Baseline)	-4.7 (± 11.7)			

Notes:

[2] - for visit 2, 14 participants, for visit 6, 10 participants

### Statistical analyses

No statistical analyses for this end point

### Secondary: Patient's Global Impression of Change (PGI-C)

End point title	Patient's Global Impression of Change (PGI-C)
End point description: To assess participant quality of life (QoL) and physical activity, as measured by Patient Reported Outcomes (PROs).	
Table 14.2/15	
End point type	Secondary

End point timeframe:  
up to 6 months

End point values	Modified intent to treat set			
Subject group type	Subject analysis set			
Number of subjects analysed	19 <sup>[3]</sup>			
Units: Patient reported outcomes				
status minimally improved	1			
status minimally worse	1			
status much improved	2			
status not changed	4			
status very much improved	1			

Notes:

[3] - Not all participants completed this PRO.

## Statistical analyses

No statistical analyses for this end point

## Secondary: EuroQoL 5 Dimensions (EQ-5D-5L) questionnaire

End point title	EuroQoL 5 Dimensions (EQ-5D-5L) questionnaire
End point description: To assess participant quality of life (QoL) and physical activity, as measured by Patient Reported Outcomes (PROs). Change to baseline means changes between Visit 2 and Visit 6 Table 14.2/16	
End point type	Secondary
End point timeframe: up to 6 months	

End point values	Modified intent to treat set			
Subject group type	Subject analysis set			
Number of subjects analysed	19			
Units: Patient reported outcome				
(walking) improved, less impaired	1			
(walking) no change	5			
(walking) worsened, more impaired	5			
(self-care) improved, less impaired	1			
(self-care) no change	10			
(self-care) worsened, more impaired	0			
(usual activities) improved, less impaired	0			
(usual activities) no change	11			
(usual activities) worsened, more impaired	0			

(pain or discomfort) improved, less impaired	0			
(pain or discomfort) no change	9			
(pain or discomfort) worsened, more impaired	2			
(anxious or depressed) improved, less impaired	2			
(anxious or depressed) no change	6			
(anxious or depressed) worsened, more impaired	3			

## Statistical analyses

No statistical analyses for this end point

## Secondary: Treatment Satisfaction Questionnaire for Medication (TSQM)

End point title	Treatment Satisfaction Questionnaire for Medication (TSQM)
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End point description:

To assess participant quality of life (QoL) and physical activity, as measured by Patient Reported Outcomes (PROs).

Score ranges from 10 (lowest satisfaction) to 100 (greatest satisfaction).

Table 14.2/17

End point type	Secondary
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End point timeframe:

up to 6 months

End point values	Modified intent to treat set			
Subject group type	Subject analysis set			
Number of subjects analysed	5 <sup>[4]</sup>			
Units: score				
arithmetic mean (standard deviation)				
Visit 2 (baseline)	37.9 (± 7.44)			
Visit 6 (change from baseline)	-1.8 (± 6.42)			

Notes:

[4] - At visit 2, 11 participants, at visit 6, 5 participants

## Statistical analyses

No statistical analyses for this end point

## Secondary: Work Productivity and Activity Impairment (WPAI) questionnaire scores

End point title	Work Productivity and Activity Impairment (WPAI) questionnaire scores
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End point description:

To assess participant quality of life (QoL) and physical activity, as measured by Patient Reported Outcomes (PROs).

Baseline = Visit 2, Change from Baseline = Visit 6

Table 14.2/18

End point type	Secondary
End point timeframe: up to 6 months	

End point values	Modified intent to treat set			
Subject group type	Subject analysis set			
Number of subjects analysed	4 <sup>[5]</sup>			
Units: score				
arithmetic mean (standard deviation)				
Percent Work Time Missed (baseline)	1.8 (± 4.64)			
Percent Work Time Missed (change from baseline)	19.4 (± 24.21)			
Percent Working Impairment (baseline)	26.7 (± 22.51)			
Percent Working Impairment (change from baseline)	10.0 (± 20.00)			
Percent Class Time Missed (baseline)	5.0 (± 10.00)			
Percent Class Time Missed (change from baseline)	1.4 (± 1.96)			
Percent Class Attending Impairment (baseline)	15.0 (± 19.15)			
Percent Class Attending Impairment (change)	0 (± 28.28)			
Percent Daily Activities Impairment (baseline)	33.3 (± 29.34)			
Percent Daily Activities Impairment (change)	-7.1 (± 32.00)			
Average Impairment Score (baseline)	32.9 (± 27.01)			
Average Impairment Score (change from baseline)	-10.7 (± 23.53)			

Notes:

[5] - Participants' number varied depending on parameter between 2 and 7 participants

## Statistical analyses

No statistical analyses for this end point

## Secondary: Number of target joints and change in target joint status from baseline

End point title	Number of target joints and change in target joint status from baseline
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End point description:

To assess target joint status, per modified International Society on Thrombosis and Haemostasis (ISTH) guidelines

14.2/11

End point type	Secondary
End point timeframe: up to 6 months	

<b>End point values</b>	Modified intent to treat set			
Subject group type	Subject analysis set			
Number of subjects analysed	19			
Units: target joints				
zero (baseline)	8			
one (baseline)	4			
two (baseline)	2			
three (baseline)	3			
four (baseline)	2			
minus four (change from baseline)	1			
minus three (change from baseline)	4			
minus two (change from baseline)	2			
minus one (change from baseline)	4			
zero (change from baseline)	8			

### Statistical analyses

No statistical analyses for this end point

## Adverse events

### Adverse events information

Timeframe for reporting adverse events:

All Adverse events were collected from the first study intervention up to 14 days after the end of study intervention.

Adverse event reporting additional description:

Treatment Emergent AEs for Safety Population

Assessment type	Non-systematic
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### Dictionary used

Dictionary name	MedDRA
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Dictionary version	27
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### Reporting groups

Reporting group title	Safety Analysis Set
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Reporting group description:

all participants who have received at least one study intervention

Serious adverse events	Safety Analysis Set		
Total subjects affected by serious adverse events			
subjects affected / exposed	2 / 21 (9.52%)		
number of deaths (all causes)	0		
number of deaths resulting from adverse events	0		
Musculoskeletal and connective tissue disorders			
Haemorrhage			
subjects affected / exposed	2 / 21 (9.52%)		
occurrences causally related to treatment / all	0 / 2		
deaths causally related to treatment / all	0 / 0		

Frequency threshold for reporting non-serious adverse events: 0 %

Non-serious adverse events	Safety Analysis Set		
Total subjects affected by non-serious adverse events			
subjects affected / exposed	7 / 21 (33.33%)		
Nervous system disorders			
Headache			
subjects affected / exposed	2 / 21 (9.52%)		
occurrences (all)	2		
Dizziness			

<p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Taste disorder</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>1 / 21 (4.76%)</p> <p>1</p> <p>1 / 21 (4.76%)</p> <p>1</p>		
<p>General disorders and administration site conditions</p> <p>Injection site bruising</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Peripheral swelling</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>1 / 21 (4.76%)</p> <p>1</p> <p>1 / 21 (4.76%)</p> <p>1</p>		
<p>Gastrointestinal disorders</p> <p>Abdominal pain</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Diarrhoea</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>1 / 21 (4.76%)</p> <p>1</p> <p>1 / 21 (4.76%)</p> <p>1</p>		
<p>Skin and subcutaneous tissue disorders</p> <p>Acne</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Urticaria</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>1 / 21 (4.76%)</p> <p>1</p> <p>1 / 21 (4.76%)</p> <p>1</p>		
<p>Musculoskeletal and connective tissue disorders</p> <p>Pain in extremity</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Joint swelling</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Arthralgia</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>1 / 21 (4.76%)</p> <p>1</p> <p>1 / 21 (4.76%)</p> <p>1</p> <p>1 / 21 (4.76%)</p> <p>1</p>		

Infections and infestations Nasopharyngitis subjects affected / exposed occurrences (all)	1 / 21 (4.76%) 1		
Staphylococcal infection subjects affected / exposed occurrences (all)	1 / 21 (4.76%) 1		
Pharyngitis streptococcal subjects affected / exposed occurrences (all)	1 / 21 (4.76%) 1		



## More information

### Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

Date	Amendment
17 September 2021	adjustment to new safety reporting/assessment standards
19 August 2022	Accommodation of inclusion of additional countries Exclusion of participants with diagnosis of von Willebrand disease

Notes:

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### Interruptions (globally)

Were there any global interruptions to the trial? No

### Limitations and caveats

None reported